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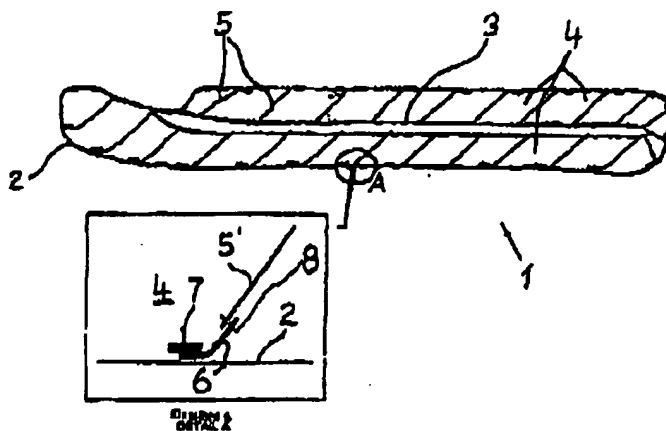
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- (71) Applicant and
(72) Inventor; BRUN, Andreas [CH/CH]; Hardstrasse 81, CH-8004 Zürich (CH).
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(54) Title: SLEEPING BAG.



(57) Abstract: [in English]

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- (73) Proprietor: Brun, Andreas
8004 Zürich (CH)
- (72) Inventor: Brun, Andreas
8004 Zürich (CH)
- (74) Agent: Schuhmann, Albrecht
c/o Merten & Pfeffer,
Allersberger Strasse 185
90461 Nürnberg (DE)

- (56) Prior-art references cited:
DE-A 3 943 308 GB-A 2 262 034
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Specification

[0001] The present invention pertains to a sleeping bag comprising chambers with a filling material, which said chambers are located adjacent to each other and are formed by partitions, as well as inner and outer linings covering the said chambers and a zip fastener.

[0002] Various different designs of sleeping bags for various purposes have been known for a long time. For sleeping in the open air, i.e., without a tent, it is desirable to be protected from moisture and dampness caused by rain, dew or snow. Sleeping bags are therefore offered that have a waterproof outer lining. One example that is used is Super Drylon by Gore, a membrane made of stretched Gore-Tex, which is laminated on nylon. The permeability of the membrane to water vapor is increased by the stretching. However, it is resistant to moisture and absolutely windproof. Microfiber fabrics, e.g., Pertex nylon, are used for less stringent requirements. Even though these sleeping bags are basically waterproof, they do have weaknesses especially where seams are located on the outside. To remedy this situation, it was proposed that sleeping bags be provided with outer covers, as this is known, for example, under the commercial name C-tex, under which a so-called cover made of a vapor-permeable triple laminate is available commercially. However, an additional part is to be carried along and packed in this case. A sleeping bag of this class with an outer lining made of a waterproof nylon material is known from, e.g., US-A 39 86 781.

[0003] The object of the present invention is to provide a waterproof sleeping bag whose sealing properties are improved and in which no additional parts need to be carried along.

[0004] This object is accomplished with the features described in claim 1. Advantageous embodiments and variants of the present invention are described in the other claims.

[0005] If partitions that cannot be sealed or cannot be bonded are used, these are sewn with fastening strips. The sleeping bag preferably has a waterproof zip fastener or a zip fastener covered with a waterproof outer flap, in which case the outer flap is preferably sealed or bonded to the outer lining.

[0006] The outer lining and the fastening strip preferably consist of a thermoplastic plastic material such as PVC or polyurethane or a fabric coated with same. All the materials that can be sealed according to the prior-art welding methods (high-frequency welding, hot air welding, hot

sealing with the use of auxiliary welding materials, helium [? - poorly legible - Tr.Ed.] cold welding, thermal impulse welding, thermal radiation welding).

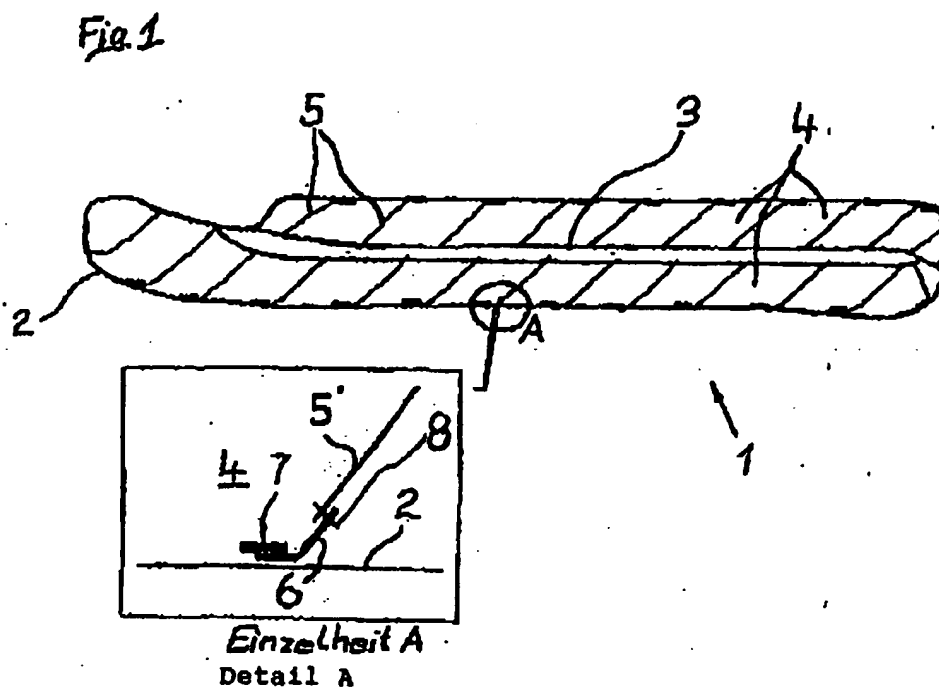
[0007] To maintain the convection and to promote the evaporation, the partitions consist, e.g., of materials such as jersey or mosquito net fabric. The inner lining preferably consists in the known manner of cotton, nylon or polyester fabric. The filling consists, as usual, of down or synthetic fibers.

[0008] The present invention will be described in greater detail below as an example on the basis of drawings.

[0009] Figure 1 shows a schematic section through a sleeping bag 1 with an outer lining 2 and an inner lining 3. Chambers 4, which are separated by partitions 5, are arranged between the outer lining 2 and the inner lining 3. The chambers 4 are filled with down or synthetic fibers. The partitions 5 are sewn to the inner lining 3 on the inside. The connection with the outer lining 2 can be seen in the enlarged detail A. The partition 5', which consists of, e.g., a mosquito net fabric, is sewn to a fastening strip 6 that can be sealed via a seam 8. The fastening strip 6 lies on the end side on the inside on the outer lining 2, which likewise consists of a material that can be sealed. To connect the fastening strip and the outer lining, a ribbon 7 made of a material that can be welded, such as polyurethane, is placed overlappingly over the end of the fastening strip 6 and sealed there. The structure being described leads to an outer lining 2 that is fully intact to the outside, without seams and without unglued areas that may be subject to abrasion or without sealing ribbons lying on the outside. Contrary to additional outer materials or separate covers, there is no appreciable increase in weight. If side seams or the like are present, these can be covered with sealing ribbons in the known manner, unless this can be avoided by lap welding.

[Claims in English]

Figure 1



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